## **Event-05**

## Virtual Session on "AI in Governance"

Date: 19-07-2023

By

**Data Science Club** 

# Information and Communication Technology



# Faculty of Technology Marwadi University, Rajkot

**Club Mentor:** 

Prof. Nishith Kotak Assistant Professor, ICT Dept., MU "Talk on AI applications for Governance" is an event in which the **Data Science Club** participated on Youtube Live on 19/07/2023 at 11:30 AM onwards. It was a virtual session on how Artificial Intelligence is going to help us change our views in the field of technology.

## **Expert's Background:**

The online expert talk exploring the advances of AI in different fields and its synergy with humans was delivered by two distinguished AI experts, **Dr. Anirban Dasgupta and Dr. Mayank Singh**, from the Department of Computer Science and Engineering at the prestigious Indian Institute of Technology (IIT), Gandhinagar, Gujarat.

Prof. Anirban Dasgupta, holding the esteemed N Rama Rao Chair, is a highly accomplished academician and researcher in the field of AI. With an illustrious career, he has made significant contributions to the development of cutting-edge AI algorithms and their applications. His work in the area of machine learning and data mining has earned him recognition both nationally and internationally. Despite the online format, Prof. Dasgupta's engaging presentation style and passion for AI shone through, captivating the virtual audience, and sparking thought-provoking discussions.

Complementing Prof. Dasgupta's expertise, Prof. Mayank Singh, an Assistant Professor in the Department of CSE at IIT Gandhinagar, brings a fresh perspective and innovative ideas to the realm of AI. As a rising star in the field, Prof. Singh has actively contributed to various AI-related research projects, focusing on human-AI interaction and ethical AI development. His captivating online presence and interactive approach during the talk ensured that the audience remained engaged, actively participating in the online Q&A session that followed.

The joint online talk by these eminent AI experts provided valuable insights into the ever-evolving landscape of AI, demonstrating how it permeates diverse fields and positively impacts human life. Leveraging online platforms, Prof. Dasgupta and Prof. Singh seamlessly delivered their knowledge, leveraging visual aids and live demonstrations to enrich the virtual experience. Despite the remote setting, the attendees left the online talk with a newfound appreciation for the collaborative potential of AI and the crucial role it plays in shaping the future of various industries. The online format allowed a broader audience to participate and benefit from the expertise of these eminent speakers, reinforcing the power of technology in disseminating knowledge and fostering meaningful discussions.

#### **Introduction:**

Artificial Intelligence (AI) has witnessed remarkable advancements over the years and has revolutionized various industries, leading to significant improvements in efficiency, accuracy, and decision-making. This report explores the role of AI in different fields, how it collaborates with and enhances human capabilities, and how AI empowers humans to become technologically adept. Additionally, we will highlight some key use cases of AI across various industries.

#### **AI in Different Fields:**

- Healthcare: AI is transforming the healthcare industry by improving diagnostics, predicting disease outcomes, and optimizing treatment plans. Machine learning algorithms analyze vast amounts of medical data to identify patterns, accelerating medical research and decision-making processes.
- Finance: In the financial sector, AI is used for fraud detection, risk assessment, and algorithmic trading. AI-powered chatbots provide personalized customer service, simplifying interactions and streamlining operations.
- Manufacturing: AI-driven automation and robotics have revolutionized the manufacturing process, enhancing productivity, reducing errors, and enabling predictive maintenance, leading to cost savings and increased product quality.
- Transportation: AI plays a crucial role in autonomous vehicles, optimizing traffic management, reducing accidents, and enhancing overall transportation efficiency.
- Education: AI-driven personalized learning platforms cater to individual student needs, offering tailored educational content, feedback, and progress tracking, thereby enhancing the learning experience.

### **Understanding Humans with AI:**

- Sentiment Analysis: AI-powered sentiment analysis tools help businesses gauge public opinion about their products or services by analyzing social media posts, reviews, and comments.
- Customer Behavior Analysis: AI analyzes customer data to understand their preferences, buying
  habits, and pain points, enabling businesses to offer personalized experiences and improve customer
  satisfaction.
- Healthcare Personalization: AI-driven healthcare solutions utilize patient data to provide personalized treatment plans and medication recommendations, leading to better patient outcomes.

#### AI in Collaboration with Humans:

- Augmented Intelligence: Rather than replacing humans, AI augments human abilities by automating
  repetitive tasks, data analysis, and decision-making processes. This synergy allows professionals to
  focus on higher-value tasks that require creativity and critical thinking.
- Creativity and Art: AI-powered tools assist artists, writers, and designers in generating ideas, creating art, and optimizing designs, expanding the boundaries of creativity.

## **Empowering Humans to be Technologically Sound:**

- AI Education and Training: AI can be used to develop interactive educational platforms that help individuals learn about AI technologies, programming languages, and their real-world applications.
- Upskilling Workforce: AI-driven training programs enable employees to acquire skills required for new job roles, ensuring a smooth transition during technological disruptions.

#### **Conclusion:**

AI's advances have made a profound impact across various fields, leading to increased efficiency, precision, and innovation. Understanding human behavior and preferences with AI enables businesses to tailor their offerings, leading to improved customer satisfaction. By collaborating with AI, humans can leverage technology to enhance their abilities and focus on tasks that require creativity and emotional intelligence. Additionally, AI empowers individuals to become technologically sound through education and upskilling programs. As AI continues to evolve, its seamless integration with humans holds the potential to unlock even greater possibilities in the future.

## **Event Photographs:**







